



12-30-04

1F02 1046

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 09/990,087 Confirmation No.: 1280
Applicant : Sligar et al.
Filed : November 20, 2001
Group Art Unit.: 1646
Examiner : Li, Ruixiang
For : MEMBRANE SCAFFOLD PROTEINS
Docket No. : 87-00
Customer No. : 23713

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Further to the Information Disclosure Statement filed March 27, 2002, the Examiner is respectfully requested to consider the additional references, copies enclosed, which may qualify as prior art. For the Examiner's convenience, the references are listed on the attached Patent and Trademark Office Form PTO-1449.

The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by a check in the amount of \$180.00 as set forth in 37 CFR 1.17(p).

01/03/2005 FRETENKIS 00000000 09990007

01 FC:1666

160.00 00

Respectfully submitted,

Donna M. Ferber
Reg. No. 33,878

GREENLEE, WINNER AND SULLIVAN, P.C.
4875 Pearl East Circle, Suite 200
Boulder, CO 80301
Telephone (303) 499-8080
Facsimile: (303) 499-8089
Email: winner@greenwin.com

Attorney Docket No.: 87-00
bmk:

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as EXPRESS MAIL in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

29 December 2004 B. Kroge
Date B. Kroge
Express Mail Receipt No. EV 584 576 703 US

Substitute for form 1449/PTO, based on PTO/SB/08A and 08B

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Application Number	09/990.087
Filing Date	11/20/2001
First Named Inventor	Sligar et al.
Art Unit	1646
Examiner Name	R. Li
Attorney Docket Number	87-00

GWS 12/22/2004

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No. ¹	Foreign Patent Document Number (include WIPO country code)	Publication Date (MM-DD-YYYY)	Name	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear (or entire document unless noted otherwise)	T ²
	1	WO 93/17031	09/02/1993	Camobell et al.		
	2	WO 00/75187	12/14/2000	Gullberg		

NON-PATENT LITERATURE DOCUMENTS

Examiner Initial*	Cite No. ¹	REFERENCE Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	3	Bakker, E.P. and Caplan, S.R. (1982), "Phospholipid Substitution of the Purple Membrane," <i>Methods in Enzymol.</i> 88:26-30	
	4	Bayburt, T.H. et al., (Dec. 2002) "Self-Assembly of Discoidal Phospholipid Bilayer Nanoparticles with Membrane Scaffold Proteins"; <i>Nano Letters</i> 2:853-856.	
	5	Bayburt, T.H. et al., (May 2002) "Single Molecule Height Measurements on Microsomal Cytochrome P450 in nanometer-Scale Phospholipid Bilayer Disks"; <i>Proceedings of the National Academy of Sciences</i> 99:6725-6730.	
	6	Bayburt, T.H. et al. (Nov. 2003) "Self-Assembly of Single Integral Membrane Proteins into Soluble Nanoscale Phospholipid Bilayers"; <i>Protein Science</i> 12:2476-2481.	
	7	Bayley, H. et al. (1982), "Delipidation, Renaturation, and Reconstitution of Bacteriorhodopsin," <i>Methods Enzymol.</i> 88:74-81	
	8	Brouillette, C. et al., (2001), "Structural models of human apolipoprotein A-I: a critical analysis and review," <i>Biochim. Biophys. Acta</i> 1531:4-46	
	9	Carlson, J.W. et al., (1997) "Imaging and Manipulation of High-Density Lipoproteins," <i>Biophysical J.</i> 73:1184-1189.	
	10	Carlson, J.W. et al. (Dec.2000) "Nanopatterning Phospholipid Bilayers"; <i>Langmuir</i> 16:3927-3931.	
	11	Chen, J.S. et al., (2002) "Amino Acids in SRS1 and SRS6 are Critical for Furanocoumarin Metabolism by CYP6B1v1, a Cytochrome P450 Monooxygenase," <i>Insect Molecular Biology</i> 11:175-186.	
	12	Civjan, N.R. et al., (2003) "Direct Solubilization of Heterologously Expressed Membrane Proteins by Incorporation into Nanoscale Lipid Bilayers"; <i>BioTechniques</i> 35:556-563.	
	13	Dencher, N.A. and Heyn, M.P. (1982) "Preparation and Properties of Monomeric Bacteriorhodopsin," <i>Methods Enzymol.</i> 88:5-10.	
	14	Denisov, I.G., et al. (March 2004) "Directed Self Assembly of Monodisperse	
Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional).

²Applicant is to place a check mark here or "x" if English language Translation is attached.

Substitute for form 1449/PTO, based on PTO/SB/08A and 08B

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Application Number	09/990.087
Filing Date	11/20/2001
First Named Inventor	Sligar et al.
Art Unit	1646
Examiner Name	R. Li
Attorney Docket Number	87-00

GWS 12/22/2004



Examiner Initial*	Cite No. ¹	REFERENCE Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Phospholipid Bilayer Nanodiscs with Controlled Size"; <i>J. Am. Chem. Soc.</i> , In Press.	
	15	Duan, et al. (2004) "Co-incorporation of Heterologously-Expressed <i>Arabidopsis</i> Cytochrome P450 and P450 Reductase into Soluble Nanoscale Lipid Bilayers"; <i>Archives Biochemistry and Biophysics</i> , In Press.	
	16	Dubois et al. (Jun. 2001) "Self-Assembly of Regular Hollow Icosahedra in Salt-Free Catanionic Solutions," <i>Nature</i> 411:672-675	
	17	Heyn, M.P. et al. (1982) "Reconstitution of Monomeric Bacteriorhodopsin into Phospholipid Vesicles;" <i>Methods Enzymol.</i> 88:31-35	
	18	Imaoka, S. et al., (1992), "Role of Phospholipids in Reconstituted Cytochrome P450 3A Form and Mechanism of Their Activation of Catalytic Activity," <i>Biochemistry</i> 31:6063-6069.	
	19	Korenbrot, J.I. (1982), "The Assembly of Bacteriorhodopsin-Containing Planar Membranes by the Sequential Transfer of Air-Water Interface Films," <i>Methods Enzymol.</i> 88:45-55	
	20	Marheineke, K. et al., (1998), "Lipid composition of <i>Spodoptera frugiperda</i> (Sf9) and <i>Trichoplusia ni</i> (Tn) insect cells used for baculovirus infection," <i>FEBS Letters</i> 441:49-52.	
	21	McGregor, C-L. (Feb 2003), "Lipopeptide detergents designed for the structural study of membrane proteins," <i>Nature Biotechnol.</i> 21:171-176	
	22	Rezaie et al. (1992), "Expression and Purification of a Soluble Tissue Factor Fusion Protein with an Epitope for an Unusual Calcium-Dependent Antibody," <i>Protein Expression and Purification</i> 3:453-460.	
	23	Savelli, G. et al. (2000), "Enzyme activity and stability control by amphiphilic self-organizing systems in aqueous solutions," <i>Curr. Opin. Colloid & Interface Science</i> 5:111-117.	
	24	Shaw, A.W. et al., (Jan. 2004) "Phospholipid Phase Transitions in Homogeneous Nanometer Scale Bilayer Discs"; <i>FEBS Letters</i> 556:260-264.	
	25	Skulachev, V.P. (1982), "A Single Turnover Study of Photoelectric Current-Generating Proteins," <i>Methods Enzymol.</i> 88:35-45	
	26	Sligar, S. (2003) "Finding a Single-Molecule Solution for Membrane Proteins"; <i>Biochem. Biophys. Res. Comm.</i> 312:115-119.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional).

²Applicant is to place a check mark here or "x" if English language Translation is attached.